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Statement of the Connecticut Green Bank on Governor's Bill 7036 AN ACT PROMOTING THE USE OF FUEL CELLS

FOR ELECTRIC DISTRIBUTION SYSTEM BENEFITS AND RELIABILITY
February 21, 2017

As the nation's first green bank, the Connecticut Green Bank ("Green Bank") leverages the limited public resources it receives to attract multiples of private investment to scale up clean energy deployment. Recently the Green Bank celebrated its 5-year anniversary, to which it has mobilized over \$1 billion of investment into Connecticut's clean energy economy, supported the creation of nearly 13,000 direct, indirect and induced jobs, reduced the energy burden on over 20,000 households and businesses, deployed over 215 MW of clean energy, and helped reduce over 2.6 million metric tons of CO2 emissions over the life of the projects. The Green Bank supports the policy vision of cleaner, cheaper and more reliable energy sources for Connecticut — while creating jobs and supporting local economic development.

The Green Bank supports this proposal.

Fuel cell companies are a specialty economic cluster in Connecticut, representing a unique local manufacturing base for clean energy technologies. Providing this additional opportunity through the Governor's proposal can bolster fuel cell industry job creation and economic activity.

Whether under an ownership model or under a power purchase agreement, fuel cell project economics became disadvantaged at the end of 2016 due to the expiration of the federal Investment Tax Credit (ITC) incentive as applied to fuel cells. This makes corporate system sales and PPA deals more challenging, and puts fuel cells at a relative disadvantage compared with other renewables (e.g., wind and solar) that remain eligible for the federal ITC incentive as a result of its extension in December 2015. It should be noted that in Connecticut, fuel cells pay sales tax for installation and servicing, therefore contributing significant economic value to the state economy and communities — while other renewables (e.g., solar) are exempt.

This proposal carries the promise of being not just a policy that promotes clean energy deployment, but also one that promotes Connecticut's industrial manufacturing sector. Table 1 shows the estimated job creation potential of investments in Connecticut's fuel cell industry.

TABLE 1. JOB YEARS CREATED PER \$1.0 MILLION OF CAPITAL INVESTED. 1

Renewable Energy Occupation	Direct Job-Years Created Per \$1M Invested	Indirect & Induced Job-Years Created Per \$1M Invested	Total Job-Years Created From \$1M Invested
Fuel Cell Manufacturing	4.9	6.4	11.3
Fuel Cell R&D / Engineering	2.9	3.8	6.7

The Green Bank has experience supporting fuel cell deployment projects. As one example, under the state's Project 150 policy the Green Bank² provided multi-year financial support to Fuel Cell Energy for the Dominion Bridgeport Fuel Cell Park. Operational since December 2013, this facility supplies 14.9 MW of continuous power to the grid with output to power approximately 15,000 homes. This project uses fuel cell technology manufactured in Connecticut and is located on a brownfield (which was remediated for the project) in a distressed municipality.

The Green Bank is the administrator of the state's successful 300 MW residential solar incentive, the Residential Solar Investment Program (RSIP). The incentive is offered to the market in declining blocks, meaning that the dollar per installed-watt incentive will ratchet down over time as more deployment occurs. From more than \$100 in 2012, the incentive today is the equivalent of a \$20-\$25 zero emission renewable energy credit (ZREC), demonstrating that the market reliance on subsidies can be dramatically reduced over time while increasing deployment through sustained orderly development. The Green Bank believes that it may be possible to administer this competitive procurement for fuel cells in a similar process, through declining incentive blocks, with an incentive offered in exchange for delivery of Class I Renewable Energy Credits to the grid or to a customer behind the meter to help satisfy the Class I Renewable Portfolio Standard. In this way, not only will the energy and environmental policies of cleaner, cheaper, and more reliable be achieved, but the economic development policies of job creation in support of the sustained orderly development of the fuel cell industry will as well.

The Green Bank stands ready to assist the Governor's Office, Energy & Technology Committee, fuel cell industry, DEEP and DECD, and the electric and natural gas utilities on this proposal.

¹ Navigant Consulting Inc., Connecticut Department of Economic and Community Development, and Connecticut Green Bank. June 2016. Clean Energy Jobs in Connecticut.

² Under our predecessor agency, the Connecticut Clean Energy Fund